

# New tools for audio description research: the VIW project

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# Overview

- Why this project?
- Previous work on audio description (AD) and corpora
- Project rationale
- Creating the materials
- Processing the materials
- The platform

# Why this project?

- Need for corpora to analyse audio description which are
  - Multimodal (audio, video, text)
  - Multilingual
  - Open access
- And allow for increasing research

# Why this project?

- Funding for one year: Europa Excelencia call (**FFI2015-62522-ERC**)
- Main researcher: Anna Matamala
- Postdoc researcher: Marta Villegas

# AD and corpora

- TIWO (Salway 2007)
- TRACCE (Jiménez Hurtado et al. 2010)
- MPPII Movie Description dataset (Rohrbach et al. 2015)
- Pear Tree Project (Mazur and Kruger 2012), inspired by Chafe (1980)
- Reviers et al. (2015)

# Challenges of multimodal corpora

- Knight (2011)
  - Design and infrastructure
  - Size and scope
  - Naturalness
  - Availability and (re)usability
- Valentini (2013)
  - Verbal and audio and visual
  - Segmentation criteria
  - Need to devise a sound methodology

# The short film

- Short film commissioned to a film director (guidelines based on literature review)
- “What happens while---”, by Núria Nia, in English.
- Dubbed into Catalan and Spanish in professional studio

**<http://pagines.uab.cat/viw/>**

# The audio descriptions

- Audio descriptions by professionals (10 in English, 10 in Catalan, 10 in Spanish): recorded video plus text
- Additionally: audio descriptions by students (volunteers in Spanish and Catalan), only text



# The corpus

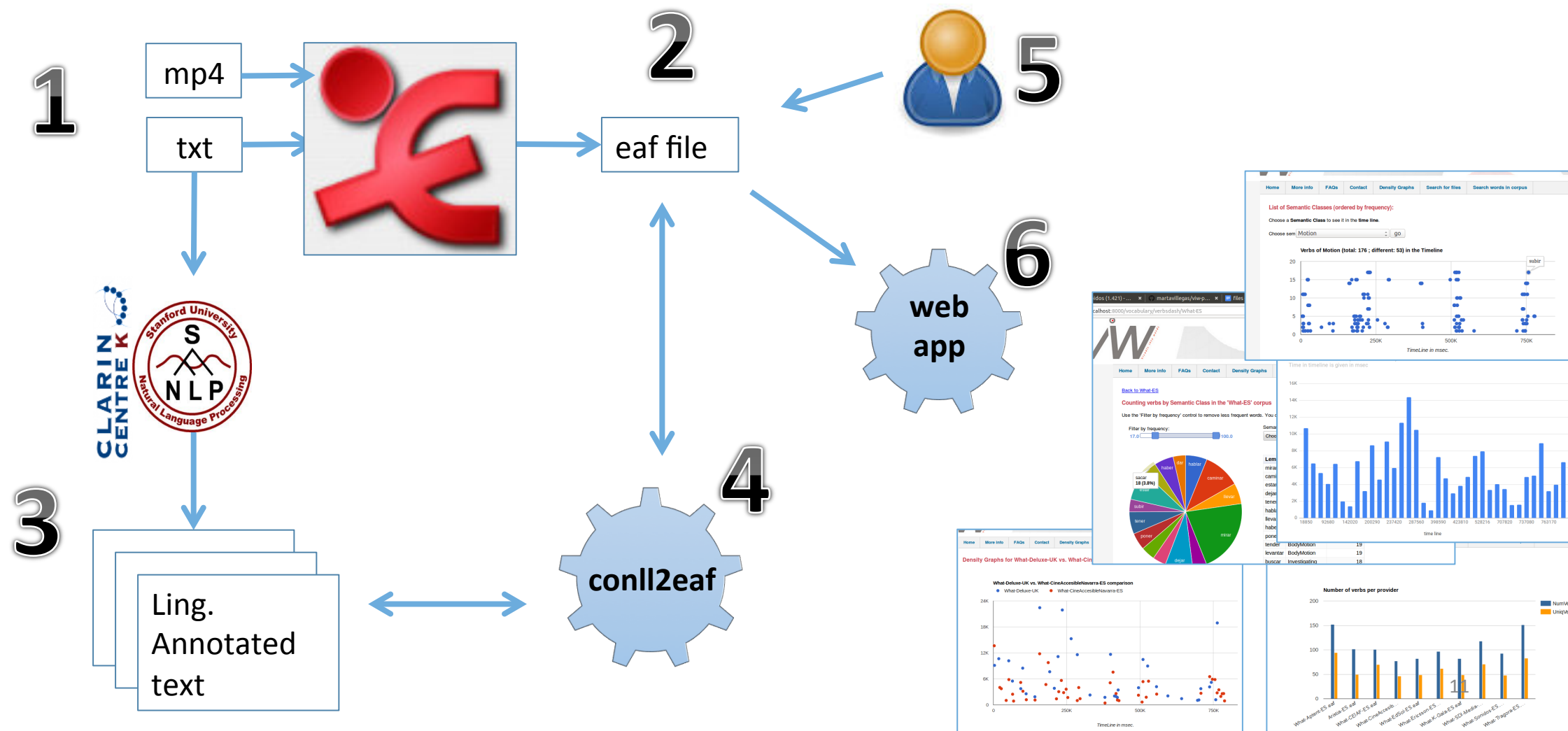
AUDIO DESCRIPTION	VERSIONS	WORDS
ENGLISH	10	6799
CATALAN	10	6888
SPANISH	10	6191
STUDENTS- CATALAN	7	7354
STUDENTS- SPANISH	10	5185
<b>GLOBAL</b>	<b>17</b>	<b>32,417</b>

# The corpus

<http://pagines.uab.cat/viw/>

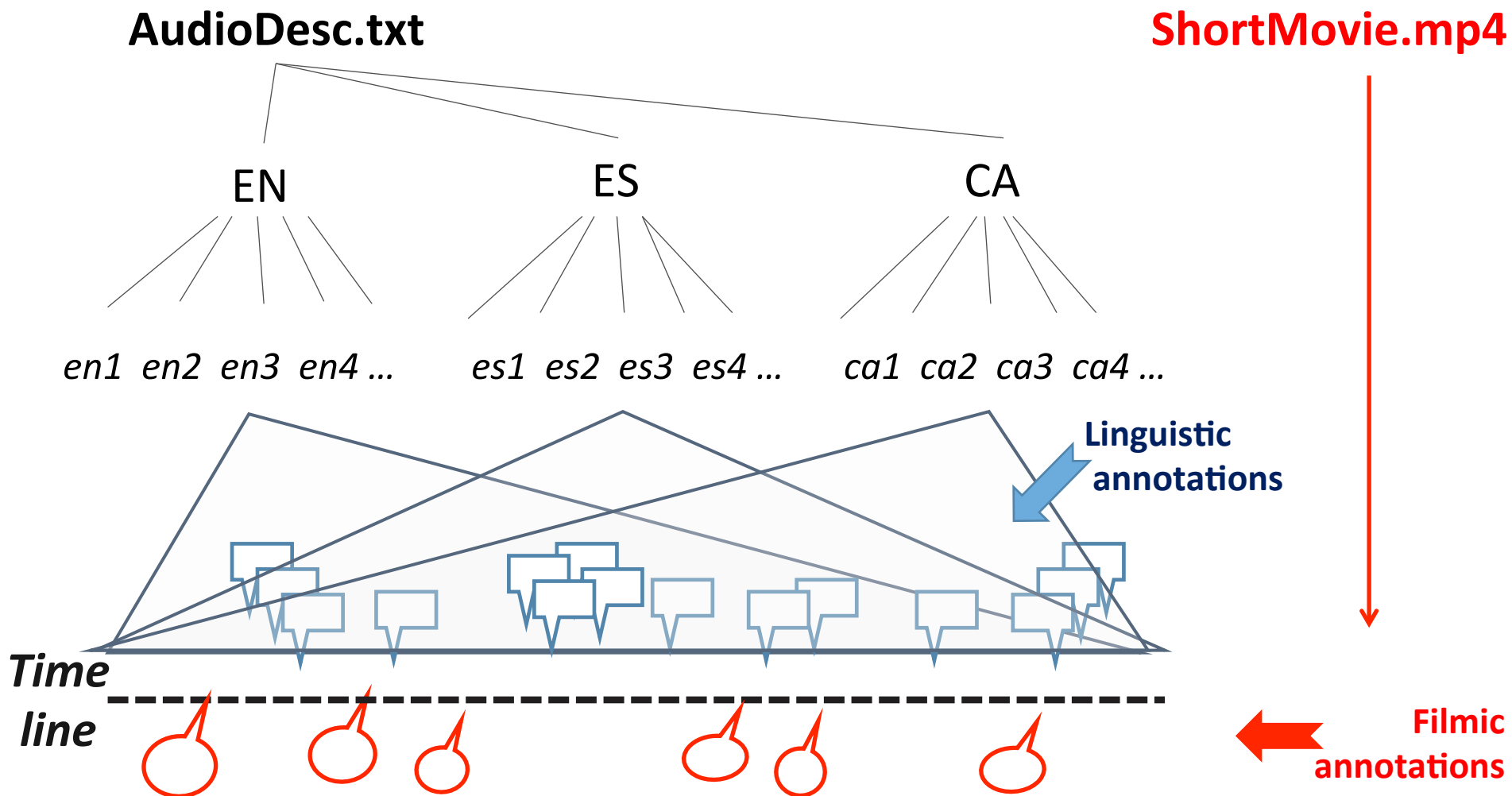
**Linked to UAB's open access repository**

# Processing the materials



# Segmenting and processing

- Linguistic tiers: AD-unit tier (sentences, chunks, tokens) and Credits tier
  - Token: parts of speech, lemma, and semantic values
- Filmic tiers: scene, shot, sound, character, text.



# The web app

- Web app using Symfony and a hosting service at UAB
- All code data are available at GitHub
- Access to source data plus some graphical visualizations

# The web app: source data

- Raw material per provider and per subcorpus to import into ELAN and into CQPweb. Also filmic annotations as eaf file.
- Visualizations for pre-established analyses.
- Access from previous page but also directly:  
<http://transmediacatalonia.uab.cat/web/>

# Data and visualisations

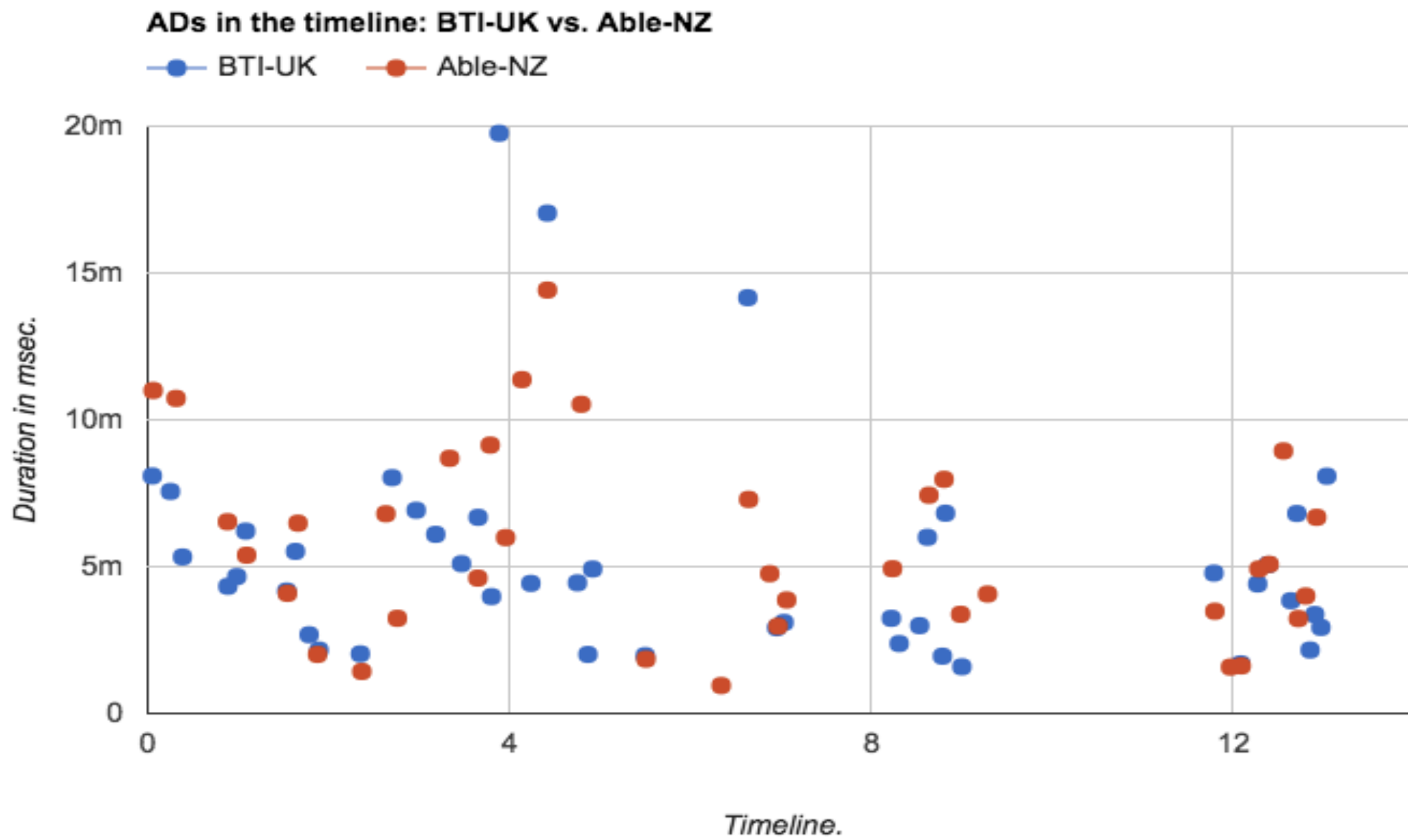
- Simple string search
- AD units, sentences and word's countings
- AD distribution in timeline
- Verb distribution in timeline, with selection of verbal semantic class.
- AD similarity (Ted Pedersen's Text-Similarity module)



# Data and visualisations

- Word frequency by PoS, per provider.
- Semantic tagging for verbs, nouns, adjectives, and adverbs.
- Html version of each eaf file, with access to visuals.  
...and many other features







# Sonidos-ES.eaf

AD-unit En una playa casi vacía una pareja pasea un perro y un hombre hace footing. La pareja lleva ropa de abrigo y el cielo está nublado.

Tokens	En	una	playa	casi vacía		una	pareja	pasea	un	perro	y
PoS	SPS00	DI0FS0	NCFS000	RG AQ0FS0		DI0FS0	NCFS000	VMIP3S0	DI0MS0	NCMS000	CC
Lemma	en	uno	playa	casi vacío		uno	pareja	pasear	uno	perro	y
Semantic	-	-	Location	-	A-SubjectiveAssessmentAttribute	-	Human	Walking	-	Animal	-
TC	<a href="#">3.980 - 13.020</a>										

Tokens	un	hombre	hace_footing	.	La	pareja	lleva	ropa	de	abrigo	y	el	cielo
PoS	DI0MS0	NCMS000	VMIP3S0	Fp DA0FS0	NCFS000	VMIP3S0	NCFS000	SPS00	NCMS000	CC DA0MS0	NCMS000		
Lemma	uno	hombre	hacer_footing	.	el	pareja	llevar	ropa	de	abrigo	y	el	cielo
Semantic	-	Human	Walking	-	-	Human	Dressing	Clothing	-	-	-	-	Location

AD-unit Sobreescrito en pantalla.

Tokens	está	nublado	.	Sobreescrito	en	pantalla	.
PoS	VSIP3S0	VMP00SM	Fp	VMP00SM	SPS00	NCFS000	Fp
Lemma	estar	nublar	.	sobreescribir	en	pantalla	.
Semantic	Aux	A-RadiatingLight	-	A-FilmLanguage	-	FilmLanguage	-
TC	<a href="#">17.600 - 19.130</a>						

# And the future?

- On-going analysis on
  - Character
  - Text on screen
  - Spatio-temporal settings
  - Professionals versus amateurs
  
- How to expand it into other languages?

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